

IN THE CLAIMS:

1. (Currently amended) A device for reduction of organic Sulphur sulphur from high Sulphur sulphur coal, comprising: which comprises

a movable cabinet,

a tubular furnace enclosed in the cabinet,

a reactor inside the furnace and including essentially consisting of three heating zones such as

a steam heating zone capable of maintaining a temperature in the range of 450-500 degree Celsius centigrade,

a promoter zone for heating a promoter therein, the promoter zone being capable of maintaining a temperature in the range of the order of 950-1100 degree Celsius, centigrade and

a reaction zone for reacting the high sulphur coal with a steam, the reaction zone being capable of maintaining a temperature in the range of 900-950 degree centigrade, wherein the said reactor being placed inside a tubular furnace is capable of providing the above said temperature temperatures required by the zones of in the said reactor, the said furnace with reactor inside being enclosed in a movable cabinet, the said reactor and furnace being provided with known energy regulators and indicators.

2. (Currently amended) A device as claimed in claim 1 wherein the tubular furnace is made up of Silliminite and insulated by quartz wool.

3. (Currently amended) A process for removal of organic sulphur from high sulphur coal using the device as claimed in claim 1-2, ~~which comprises comprising~~
heating the promoter zone [[()]] containing ~~the a~~ promoter[()] at a temperature in the range of 1100±50 degree Celsius and the steam zone at a temperature in the range of 450 to 500 degree Celsius,

crushing ~~the an~~ input coal to -72 mesh BS and

feeding the crushed coal into the reaction zone,

producing steam in a flask, ~~preferably made of glass~~ and passing the steam through the reactor,

maintaining the temperature at 900 degree Celsius for about 1 hour, after it attains a temperature of about 900 degree Celsius, passing the gas evolved from the reactor through a series of bubblers, ~~preferably made of glass~~, containing ammoniacal cadmium chloride solution,

cooling the furnace to room temperature and

discharging ~~the a~~ product coke/char.

4. (Currently amended) A process as claimed in claim 3, wherein the promoter ~~used~~ is mixture of copper-iron turnings in the ratio of 1:9.

5. (Currently amended) A process as claimed in claim 3 claims 2-4, ~~wherein the rate of rise in further comprising increasing the temperatures~~ temperature in the promoter zone and the reaction zone is at a rate of 5 degree Celsius per minute.

6. (Currently amended) A process as claimed in claim 3 2-5 wherein around 80% sulphur from the coal is removed by the process.

7. (New) A device as claimed in claim 1, wherein the steam heating zone has a length of 17mm.

8. (New) A device as claimed in claim 1, wherein the promoter heating zone has a length of 205 mm.

9. (New) A device as claimed in claim 1, wherein the reaction zone has a length of 200 mm.